Rec'd PCT/PTO 2 6 MAY 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date 28 April 2005 (28.04.2005)

PCT

(10) International Publication Number WO 2005/037834 A1

- (51) International Patent Classification⁷: C07D 471/04, 471/20, 209/08, 401/12, 403/04, A61K 31/437, 31/438, 31/404, 31/4439, 31/496, 3/04, 3/10, 25/00
- (21) International Application Number:

PCT/SE2004/001508

- (22) International Filing Date: 20 October 2004 (20.10.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0302760-4 60/523,126 20 October 2003 (20.10.2003) SE 18 November 2003 (18.11.2003) US

- (71) Applicant (for all designated States except US): BIOVIT-RUM AB [SE/SE]; S-112 76 Stockholm (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JOHANSSON, Gary [SE/SE]; Albert Engströmsgatan 1, 2tr, S-754 30 Uppsala (SE). BRANDT, Peter [SE/SE]; Barks väg 12, S-170 73 Solna (SE). DYKES, Graeme, J. [GB/SE]; Byggmästargatan 11 A, S-754 35 Uppsala (SE). NILSSON, Björn, M. [SE/SE]; Igeldammsgatan 20, 5tr, S-112 49 Stockholm (SE).
- (74) Agent: DANIELSSON, Helena; Biovitrum AB, S-112 76 Stockholm (SE).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NOVEL TETRAYDROSPIRO{PIPERIDINE-2,7 $^{\circ}$ -PYRROLO[3,2-b]PYRIDINE DERIVATIVES AND NOVEL INDOLE DERIVATIVES USEFUL IN THE TREATMENT OF 5-HT6 RECEPTOR -RELATED DISORDERS

$$(R^{m)} \underset{W_{2} \sim W_{3}}{\overset{U}{\underset{A}{\bigvee}}} \underset{A}{\overset{Z}{\underset{A}{\bigvee}}} R^{m'}$$

$$(1)$$

(57) Abstract: The present invention relates to compounds of formula (I): Formula (I) wherein U, P, W₁, W₂, W₃, v, Y, Z, R^m, and R^m are as described herein, to pharmaceutical compositions comprising the compounds, to processes for their preparation, as well as to the use of the compounds for the preparation of a medicament against 5-HT₆ receptor-related disorders.